



NEWS RELEASE

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NTU Singapore study finds link between empathy and care for the environment

A study conducted by a team of researchers from **Nanyang Technological University, Singapore (NTU Singapore)** has found that Singaporeans, who scored high levels of empathy, would choose to prioritise the environment over the convenience and comfort of both themselves and their families or co-workers.

Nearly eight out of ten (79%) respondents to a series of surveys said they would prefer to buy an energy-efficient air-conditioner over a conventional one, even though the latter was cheaper.

To cut down on carbon emissions, more than eight out of ten (82%) would keep room temperatures at an optimal 23°C to 25°C, despite knowing their children or co-workers would be more comfortable with a cooler setting.

The researchers acknowledge that saving on utility bills is the main reason behind why people make energy saving choices.

However, the findings presented a counterpoint to that notion. Their statistical analysis showed that respondents' preferences were associated with their level of empathy and that they would choose to spend more money to minimise their carbon footprint.

The findings are important in understanding Singaporeans' attitudes in relation to the country's efforts to reduce energy consumption in households, say the authors. Due to resource scarcity, the city-state has embarked on national initiatives such as the **Singapore Green Plan 2030**, which also focuses on energy sustainability for a more liveable and sustainable future.

The results of the joint study were published in *Energy Research & Social Science*, an academic publication by Elsevier.

NTU Associate Professor Georgios Christopoulos from the Nanyang Business School, who led the study, said: "As an illustration, imagine being a parent who is

deciding between turning up the air conditioning to ensure that your child sleeps well, or choosing to keep at a 'recommended' setting to save electricity. It seemed obvious that a parent would prioritise his or her child's needs. However, we found the opposite – at least for Singaporeans. The more empathy a Singaporean has, the more likely he or she would consider the overall or long-term environmental or societal impact, ultimately choosing to forgo the child's comfort."

Swati Sharma, a PhD student at NTU's Interdisciplinary Graduate Programme, who co-led the study, said: "The main driving force for this eco-friendly behaviour is empathy, which we define as "a basic human disposition to experience warmth and concern for others". The more empathy a Singaporean feels about others, the more likely he or she is to adopt behaviours that support 'the greater good' and contribute to making Singapore a resilient and sustainable society."

The research team obtained the results after doing an experimental survey involving 520 resident Singaporeans. The sample included a large majority of homeowners (87%), close to Singapore's national figure (91%).

Other actions that constituted energy-saving behaviours included turning off electrical devices when not in use (89%) and opting for locally grown vegetables (62%) over those from Europe or the US to cut down on their carbon footprint.

The team also noted that age, education, and being a homeowner affected preferences for energy-saving options. Singaporeans who were older, had higher education qualifications and owned public housing tended to prefer energy-saving options.

To further validate their research, the NTU team will conduct additional studies into a wider spectrum of behaviours, including those in response to environmental, organisational, urban, financial, and societal threats.

The team is also exploring the possibility of validating their findings in different geographical areas and cultural contexts, including people's attitudes towards measures to curb Covid-19.

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Note to Editors:

The NTU research paper titled "[*Caring for you vs. caring for the planet: Empathic concern and emotions associated with energy-saving preferences in Singapore*](#)", is published in *Energy Research & Social Science*, 25 December 2020. DOI 10.1016/j.erss.2020.101879

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About Nanyang Technological University, Singapore

A research-intensive public university, Nanyang Technological University, Singapore (NTU Singapore) has 33,000 undergraduate and postgraduate students in the Engineering, Business, Science, Humanities, Arts, & Social Sciences, and Graduate colleges. It also has a medical school, the Lee Kong Chian School of Medicine, established jointly with Imperial College London.

NTU is also home to world-renowned autonomous institutes – the National Institute of Education, S Rajaratnam School of International Studies, Earth Observatory of Singapore, and Singapore Centre for Environmental Life Sciences Engineering – and various leading research centres such as the Nanyang Environment & Water Research Institute (NEWRI) and Energy Research Institute @ NTU (ERI@N).

Ranked amongst the world's top universities by QS, NTU has also been named the world's top young university for the last seven years. The University's main campus is frequently listed among the Top 15 most beautiful university campuses in the world and it has 57 Green Mark-certified (equivalent to LEED-certified) building projects, of which 95% are certified Green Mark Platinum. Apart from its main campus, NTU also has a campus in Singapore's healthcare district.

Under the NTU Smart Campus vision, the University harnesses the power of digital technology and tech-enabled solutions to support better learning and living experiences, the discovery of new knowledge, and the sustainability of resources.

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